WHAT IS CLAIMED IS:

1. A method for transmitting packet data in a packet communication network, comprising the steps of:

determining an operating state of the network and deciding a period for

5   transmitting a full packet based on said operating state; and

transmitting full packets having uncompressed headers during periodic transmission times according to the decided full-packet transmission period, and transmitting compressed packets during other transmission times.

2. The method as set forth in claim 1, wherein the step of deciding the

10   transmission period comprises the steps of:

producing a packet retransmission ratio as a ratio of the number of retransmitted packets to the number of packets transmitted in a latest period of measurement of the operating state of the network; and

deciding the full-packet transmission period based on said packet

15   retransmission ratio.

3. The method as set forth in claim 2, wherein a period for determining the operating state of the network is the same as a period for transmitting state information according to a real-time transmission protocol (RTP).

4. The method as set forth in claim 2, wherein the full-packet transmission

20   period is decided as a first value if the packet retransmission ratio is at or above a predetermined high-level threshold;

the full-packet transmission period is decided as a second value being greater

than the first value if the packet retransmission ratio is at or below a predetermined low-level threshold; and

the full-packet transmission period is decided as a third value between the first value and the second value if the packet retransmission ratio is between the

5   low-level threshold and the high-level threshold.

5. The method as set forth in claim 4, wherein the first value is "1".

6. The method as set forth in claim 4, wherein the second value is twice the third value.

7. The method as set forth in claim 1, wherein the step of deciding the full-

10   packet transmission period comprises the steps of:

producing a packet retransmission ratio as a ratio of the number of retransmitted packets to the number of packets transmitted in a latest period of measurement of the operating state of the network;

accumulating the produced packet retransmission ratio and other packet

15   retransmission ratios produced during previous measurement times and producing an average packet retransmission ratio; and

deciding the full-packet transmission period according to the produced average packet retransmission ratio.

8. The method as set forth in claim 7, wherein the average packet

20   retransmission ratio is produced by:

$AR(i) = (1 - \alpha) * AR(i - 1) + \alpha * R$, wherein "AR" denotes the average packet retransmission ratio, "i" denotes an index for identifying a period

for determining the operating state of the network, "R" denotes a packet retransmission ratio, and "α" denotes a weight value between "0" and "1".

9. The method as set forth in claim 7, wherein a period for determining the operating state of the network is the same as a period for transmitting state information according to a real-time transmission protocol (RTP).

10. The method as set forth in claim 7, wherein the full-packet transmission period is decided as a first value if the packet retransmission ratio is at or above a predetermined high-level threshold;

the full-packet transmission period is decided as a second value being greater than the first value if the packet retransmission ratio is at or below a predetermined low-level threshold; and

the full-packet transmission period is decided as a third value between the first value and the second value if the packet retransmission ratio is between the low-level threshold and the high-level threshold..

11. The method as set forth in claim 10, wherein the first value is "1".

12. The method as set forth in claim 10, wherein the second value is twice the third value.

13. An apparatus for transmitting packet data in a packet communication network, comprising:

a controller for determining an operating state of the network and deciding a period for transmitting a full packet based on said operating state; and

a transmitter for transmitting full packets having uncompressed headers during periodic transmission times based on the decided full-packet transmission period, and transmitting compressed packets during other transmission times.

14. The apparatus as set forth in claim 13, wherein the controller produces a packet retransmission ratio as a ratio of the number of retransmitted packets to the number of packets transmitted in a latest period of measurement of the operating state of the network, and decides the full-packet transmission period based on said packet retransmission ratio.

15. The apparatus as set forth in claim 14, wherein the full-packet transmission period is decided as a first value if the packet retransmission ratio is at or above a predetermined high-level threshold;

the full-packet transmission period is decided as a second value being greater than the first value if the packet retransmission ratio is at or below a predetermined low-level threshold; and

the full-packet transmission period is decided as a third value between the first value and the second value if the packet retransmission ratio is between the low-level threshold and the high-level threshold.

16. The apparatus as set forth in claim 15, wherein the first value is "1".

17. The apparatus as set forth in claim 15, wherein the second value is twice the third value.

18. The apparatus as set forth in claim 13, wherein the controller produces

a packet retransmission ratio as a ratio of the number of retransmitted packets to the number of packets transmitted in a latest period of measurement of the operating state of the network, accumulates the produced packet retransmission ratio and other packet retransmission ratios produced during previous measurement times, produces an average packet retransmission ratio, and decides the full-packet transmission period according to the produced average packet retransmission ratio.

19. The apparatus as set forth in claim 18, wherein the average packet retransmission ratio is produced by:

$$AR(i) = (1 - \alpha) * AR(i - 1) + \alpha * R,$$ wherein "AR" denotes the average packet retransmission ratio, "i" denotes an index for identifying a period for determining the operating state of the network, "R" denotes a packet retransmission ratio, and "α" denotes a weight value between "0" and "1".

20. The apparatus as set forth in claim 18, wherein the full-packet transmission period is decided as a first value if the packet retransmission ratio is at or above a predetermined high-level threshold;

the full-packet transmission period is decided as a second value being greater than the first value if the packet retransmission ratio is at or below a predetermined low-level threshold; and

the full-packet transmission period is decided as a third value between the first value and the second value if the packet retransmission ratio is between the low-level threshold and the high-level threshold.

21. The apparatus as set forth in claim 20, wherein the first value is "1".

22. The apparatus as set forth in claim 20, wherein the second value is twice the third value.